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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,349

10/28/2003

Wolfgang Lubcke

LUBC3001C/FJD

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BACON & THOMAS, PLLC

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FOURTH FLOOR

ALEXANDRIA, VA 22314-1176

EXAMINER

DOLE, TIMOTHY J

ART UNIT

PAPER NUMBER

2858

MAIL DATE

DELIVERY MODE

03/20/2012

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/694,349	Applicant(s) LUBCKE ET AL.	
	Examiner TIMOTHY J. DOLE	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2012.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 2,6-9,11,12 and 19-41 is/are pending in the application.
- 5a) Of the above claim(s) 19-39 is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☐ Claim(s) 2,6-9,11,12,40 and 41 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 28 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/677,725.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114 was filed in this application after a decision by the Board of Patent Appeals and Interferences, but before the filing of a Notice of Appeal to the Court of Appeals for the Federal Circuit or the commencement of a civil action. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on January 30, 2012 has been entered.

Claim Objections

2. Claims 11 and 41 are objected to because of the following informalities: claim 11 was amended to change the dependency to claim 14; however claim 14 was previously canceled. It appears that claim 11 should depend on claim 41, and will be treated as such for the purpose of examination. In claim 41, “constitutes” should be “constitute”. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 40, 41, 2, 6, 8, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright et al. (US 4,232,300).

Referring to claim 40, Wright discloses a measuring arrangement, comprising: a measuring instrument (fig. 1 elements (20), (22) and (14) in Process Area); a higher order unit (fig. 1 (28)); and a first pair of lines (fig. 1 (24) and (26)) and a second pair of lines (fig. 1 (30) and (32)) for electrically connecting said measuring instrument and said higher order unit (fig. 1), wherein: said higher order unit comprises at least two transmitter feed units (fig. 3 wherein the first transmitter feed unit comprises (24 VDC), (92) and (94) and column 7, lines 1-15; and wherein the second transmitter feed unit comprises (24 VDC), (96) and (98) and column 7, lines 16-23) operable to supply a conventional two-wire measuring instrument with electric power (figs 1 and 3, column 4, lines 15-26 and column 7, lines 1-23); during operation a signal current flows via said first pair of lines (column 4, lines 40-51) and a supply current flows via said second pair of lines (column 4, lines 52-56); each of said first pair of lines and said second pair of lines is connected, respectively, with one of said at least two transmitter feed units (figs 1 and 3 and column 7, lines 1-23); and said signal current representing an instantaneous measured value (column 4, lines 40-51), and said supply current, and at least a portion of the signal current supplies said measuring instrument (column 7, lines 1-23).

Referring to claim 2, Wright discloses the arrangement as claimed wherein the supply current varies in accordance with a current power demand of said measuring instrument (column 4, lines 52-56 and column 7, lines 16-23).

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Referring to claim 6, Wright discloses the arrangement as claimed wherein: each of said first and said second pairs of lines is connected to a current-voltage limiter (fig. 3 (52) and (52c)).

Referring to claim 8, Wright discloses the arrangement as claimed wherein: the measuring instrument comprises a sensor (fig. 1 (14)) for detecting at least one physical variable (fig. 1 (level and/or composition)).

Referring to claim 41, Wright discloses an electrically powered measuring device (fig. 1 elements (20), (22) and (14) in Process Area), comprising: two ports that constitute a two-wire interface (fig. 1 ports for wires 24 and 26 and column 4, lines 15-17); and at least one additional port for connecting a second cable (fig. 1 ports for wires 30 and 32 and column 4, lines 15-22), wherein: said two-wire interface connecting a dual-conductor cable (fig. 1 (24) and (26)) to the electrically powered measuring device (fig. 1), by way of which electric power is fed to the electrically powered measuring device (figs 1 and 3, column 4, lines 15-26 and column 7, lines 1-23); from the electrically powered measuring device a measuring signal is transmitted (column 4, lines 40-51); and said second cable allows the feeding of additional electric power to the electrically powered measuring device (figs 1 and 3, column 4, lines 15-26 and lines 52-56 and column 7, lines 1-23).

Referring to claim 11, Wright discloses the device as claimed wherein: said at least one additional port comprises two further ports (fig. 1 ports for wires 30 and 32 and column 4, lines 15-22), constituting a second two-wire interface for connecting a second dual-conductor cable (fig. 1 (30) and (32)).

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Referring to claim 12, Wright discloses the device as claimed wherein: the current emanating from the first two-wire interface and/or the current emanating from the second two-wire interface is limited (fig. 3 (52) and (52c)).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (shown above) in view of Belforte et al. (US 6,194,909).

Referring to claim 7, Wright discloses the arrangement as claimed except wherein: said first and said second pairs of lines are galvanic isolated from each other.

Belforte discloses a measuring arrangement where first and second pairs of lines are galvanic isolated from each other (fig. 1 (17) and column 2, lines 29-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the galvanic isolation of Belforte into the apparatus of Wright for the purpose of reducing shared currents between lines.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (shown above) in view of Burns et al. (US 6,047,222).

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Referring to claim 9, Wright discloses the arrangement as claimed except wherein: the higher-order unit comprises a bus line for transmitting measured values representing said at least one physical variable.

Burns discloses a measuring arrangement (fig. 12) wherein the higher-order unit (fig. 12 (106)) comprises a bus line (fig. 12 (104)) for transmitting measured values representing said at least one physical variable (fig. 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the bus line of Burns into the apparatus of Wright for the purpose of making it possible to measure variables from multiple field devices (fig. 12 (116)).

Response to Arguments

8. Applicant's arguments with respect to the claims have been considered but are moot in view of the new grounds of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY J. DOLE whose telephone number is (571)272-2229. The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melissa Koval can be reached on (571) 272-2121. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TIMOTHY J. DOLE/

Primary Examiner, Art Unit 2858